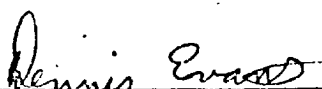


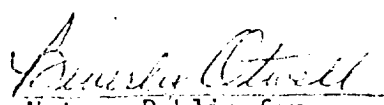
AMOCO PRODUCTION COMPANY
EMPIRE SOUTH DEEP UNIT WELL NO. 19
2280 FNL X 660 FEL, Sec 36, Unit H, T-17-S, R-28-E
EDDY COUNTY, NEW MEXICO

DEVIATION SURVEY

<u>Depth in Feet</u>	<u>Deviation-In Degrees</u>
100	1/2
290	1/4
389	1/4
680	1/2
1105	3/4
1601	3/4
2125	1 1/2
2314	1 3/4
2511	1 1/4
2783	1
2900	1 1/4
2957	1
3237	1 1/4
3482	1 1/4
3825	1 1/4
4046	1 1/4
4265	3/4
4545	1 1/4
4763	1 3/4
4877	1 1/4
5145	2
5300	1 1/2
5458	1 1/2
5638	1 1/2
5850	1 1/2
5980	1 1/2
6160	1 3/4
6316	3
6378	2 3/4
6470	2 1/4
6564	3
6660	2 1/2
6780	2 1/2
6886	2 3/4
6980	3
7103	3 3/4
7197	3 3/4
7282	3 1/2
7425	3
7529	3
7693	2 1/4
7842	2 1/4
8115	2 1/4
8400	2
8825	1/2
9300	3/4
9667	1
10,130	1 3/4
10,245	1 1/2
10,734	1 1/4
10,859	1 1/2
11,200	1 1/2

The above is true and correct to the best of my knowledge.


Assist. Admin. Analyst


Notary Public for
Hockley County, Texas

11-7-78